Ms. Dear Schramm-Satayathum International Truck and Engine Corporation 5565 Brookville Road Indianapolis, Indiana 46219

Re: Significant Source Modification No:

097-16709-00039

Dear Ms. Schramm-Satayathum:

International Truck and Engine Corporation applied for a Part 70 operating permit on October 24, 1996 for a gray iron foundry operation and engine testing and assembly operations. An application to modify the source was received on October 24, 2002. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

- (a) One (1) head grinding operation identified as EU-F06N with a rated capacity of 5 tons per hour, controlled by a 21,000 cfm fabric filter baghouse exhausting to stack SV-06N.
- (b) One block broaching operation identified as EU-F07N with a rated capacity of 10 tons per hour, controlled by a 21,000 cfm fabric filter baghouse exhausting to stack SV-07N.

The proposed Significant Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(I)(3). If there are no changes to the proposed construction of the emission units, the source may begin operating on the date that IDEM receives an affidavit of construction pursuant to 326 IAC 2-7-10.5(h). If there are any changes to the proposed construction the source can not operate until an Operation Permit Validation Letter is issued.

OES has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Mr. Mike Pring, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7840 to speak directly to Mr. Pring. Questions may also be directed to Monica Dick of my staff at (317) 327-2512.

Sincerely,

Original Signed by John B. Chavez John B. Chavez Administrator Indianapolis Office of Environmental Services

Attachments ERG/MP

cc: File

Monica Dick - Permits Matt Mosier - Compliance Mindy Hahn - IDEM

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF AIR QUALITY AND CITY OF INDIANAPOLIS, OFFICE OF ENVIRONMENTAL SERVICES

PART 70 SIGNIFICANT SOURCE MODIFICATION

International Truck and Engine Corporation 5565 Brookville Road Indianapolis, Indiana 46219

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

| Source Modification No.: 097-16709-00039 | |
|---|----------------------------------|
| Issued by: Original Signed by John B, Chavez John B. Chavez, Administrator Office of Environmental Services | Issuance Date: February 18, 2003 |

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Certification

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SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ), and Office of Environmental Services (OES). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a head grinding operation.

Responsible Official: Plant Manager

Source Address: 5565 Brookville Road, Indianapolis Indiana 46219
Mailing Address: 5565 Brookville Road, Indianapolis Indiana 46219

Phone Number: (317) 352-4892 SIC Code: 3321 and 3714

County Location: Marion

County Status: Attainment for all criteria pollutants

Source Status: Part 70 Permit Program

Major Source, under PSD Rule;

Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

- (a) One head grinding operation identified as EU-F06N with a rated capacity of 5 tons per hour, controlled by a 21,000 cfm fabric filter baghouse exhausting to stack SV-06N.
- (b) One block broaching operation identified as EU-F07N with a rated capacity of 10 tons per hour, controlled by a 21,000 cfm fabric filter baghouse exhausting to stack SV-07N.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).

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SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
- (e) In the event that the Part 70 application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:
 - (1) If the Part 70 draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Part 70 draft.
 - (2) If the Part 70 permit has gone through final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go through a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Part 70 permit at the time of issuance.
 - (3) If the Part 70 permit has gone through public notice, but has not gone through final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Part 70 permit, and the Title V permit will issued after EPA review.

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SECTION C

GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

City of Indianapolis Office of Environmental Services 2700 South Belmont Avenue Indianapolis, Indiana 46221

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, and OES, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, and OES. IDEM, OAQ, and OES, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP

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does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

City of Indianapolis
Office of Environmental Services
2700 South Belmont Avenue
Indianapolis, Indiana 46221

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

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Compliance Requirements [326 IAC 2-1.1-11]

C.7 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.9 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

- C.10 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
 - (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
 - (b) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- C.11 Compliance Response Plan Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]
 - (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
 - (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

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(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

- (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
- (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
- (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.12 Emergency Provisions [326 IAC 2-7-16]

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- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the

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affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and OES, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,

Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

City of Indianapolis Office of Environmental Services 2700 South Belmont Avenue Indianapolis, Indiana 46221

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

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(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

- (e) IDEM, OAQ, and OES, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, and OES, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this
 permit, the Permittee shall take appropriate response actions. The Permittee shall
 submit a description of these response actions to IDEM, OAQ, and OES, within thirty
 (30) days of receipt of the test results. The Permittee shall take appropriate action to
 minimize excess emissions from the affected facility while the response actions are
 being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.14 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or OES makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or OES within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.15 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 International Truck and Engine Corporation Page 12 of 16
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Indianapolis, Indiana 46206-6015

and

City of Indianapolis Office of Environmental Services 2700 South Belmont Avenue Indianapolis, Indiana 46221

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and OES, on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1

FACILITY OPERATION CONDITIONS

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Facility Description [326 IAC 2-7-5(15)]

- (a) One (1) head grinding operation identified as EU-F06N with a rated capacity of 5 tons per hour, controlled by a 21,000 cfm fabric filter baghouse exhausting to stack SV-06N.
- (b) One block broaching operation identified as EU-F07N with a rated capacity of 10 tons per hour, controlled by a 21,000 cfm fabric filter baghouse exhausting to stack SV-07N.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 20705(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from the head grinding and block broaching facilities EU-F06N and EU-F07N shall be limited to 0.03 grain per dry standard cubic foot.

D.1.2 PSD Minor Limit [40 CFR Part 52.21] [326 IAC 2-2]

The Permittee shall limit the filterable and condensible emissions of PM and PM10 to less than 0.005 grains per dry standard cubic foot of exhaust gas from the head grinding and block broaching operations EU-F06N and EU-F07N. This emissions limitation is equivalent to 7.88 tons of PM and PM10 per 12 consecutive month period. Compliance with this condition shall make the PSD regulation 326 IAC 2-2 and 40 CFR Part 52.21 not applicable.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.1.4 Particulate Control

In order to comply with D.1.1 and D.1.2, the fabric filter baghouse for particulate control shall be in operation and control emissions from the head grinding and block broaching operations at all times that the head grinding and block broaching operations are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.5 Visible Emissions Notations

- (a) Once per shift emission notations of the head grinding and block broaching operation stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

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(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

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D.1.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the head grinding and block broaching operations at least once per shift when the head grinding and block broaching operations are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and OES, and shall be calibrated at least once every six (6) months.

D.1.7 Baghouse Inspections

An inspection shall be performed within the last month of each calendar quarter of all bags controlling the process. All defective bags shall be replaced.

D.1.8 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.9 Record Keeping Requirements

(a) To document compliance with Condition D.1.5, the Permittee shall maintain records of visible emission notations of the head grinding and block broaching operations stack exhaust once per shift.

International Truck and Engine Corporation Page 15 of 16 Indianapolis, Indiana SSM: 097-16709-00039

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(b) To document compliance with Condition D.1.6, the Permittee shall maintain the records once per shift of the total static pressure drop during normal operation.

- (c) To document compliance with Condition D.1.7, the Permittee shall maintain records of the results of the inspections required under Condition D.1.7.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

International Truck and Engine Corporation Indianapolis, Indiana Permit Reviewer: ERG/MP

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

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and City of Indianapolis, Office of Environmental Services

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: International Truck and Engine Corporation

Source Address: 5565 Brookville Road, Indianapolis, Indiana 46219 Mailing Address: 5565 Brookville Road, Indianapolis, Indiana 46219

Source Modification No.: 097-16709-00039

| This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval. |
|---|
| Please check what document is being certified: |
| 9 Test Result (specify) |
| 9 Report (specify) |
| 9 Notification (specify) |
| 9 Affidavit (specify) |
| 9 Other (specify) |
| |
| I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. |
| Signature: |
| Printed Name: |
| Title/Position: |
| Date: |

Indiana Department of Environmental Management Office of Air Quality and City of Indianapolis Office of Environmental Support

Addendum to the Technical Support Document for a Part 70 Significant Source Modification

Source Background and Description

Source Name: International Truck and Engine Corporation

Source Location: 5565 Brookville Road, Indianapolis, Indiana 46219

 County:
 Marion

 SIC Code:
 3714, 3321

 Operation Permit No.:
 T097-6993-00039

Operation Permit Issuance Date: Part 70 permit not yet issued

Source Significant Modification No.: 097-16709-00039

Permit Reviewer: ERG/MP

On January 8, 2003, the Office of Air Quality (OAQ) and the Office of Environmental Services (OES) had a notice published in the Indianapolis Star, 307 North Pennsylvania Avenue, Indiana, 46204-1819 stating that International Truck and Engine Corporation had applied for a Part 70 Significant Source Modification to operate a head grinding and block broaching operation, both with control. The notice also stated that OAQ and OES proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On February 4, 2003, International Truck and Engine Corporation submitted one comment on the proposed Part 70 Significant Source Modification. The summary of the comment is as follows:

Regarding Source Modification No. 097-16709-00039 concerning the head grinding and block broaching operations, International Truck and Engine Corporation ('International') at 5565 Brookville Road, Indianapolis, Indiana 46219, would like to make the following comment:

Section D.1.6 - Parametric Monitoring: "When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 to 6.0 inches of water..."

International would like to change the verbiage as follows: "When for any one reading, the pressure drop across the baghouse is outside the normal range of **2.0** to **10.0** inches of water..." International believes that to be consistent with previous Part 70 Significant Source Modification permits that have been issued to the 5565 Brookville Road, Indianapolis facility, maintaining a common range would decrease the likelihood of confusion in the requirements for the numerous baghouses.

Response to Comment:

Condition D.1.6 has been revised as requested.

Indiana Department of Environmental Management Office of Air Quality

and

City of Indianapolis, Office of Environmental Services (OES)

Technical Support Document (TSD) for a Part 70 Significant Source Modification

Source Background and Description

Source Name: International Truck and Engine Corporation

Source Location: 5565 Brookville Road, Indianapolis, Indiana 46219

 County:
 Marion

 SIC Code:
 3714, 3321

 Operation Permit No.:
 T097-6993-00039

Operation Permit Issuance Date: Part 70 permit not yet issued

Source Permit Modification No.: 097-16709-00039

Permit Reviewer: ERG/MP

The Office of Air Quality (OAQ) and the Office of Environmental Services (OES) have reviewed a modification application from International Truck and Engine Corporation relating to the operation of a gray iron foundry operation and engine testing and assembly operations. The modification consists of the following emission units:

- (a) One (1) head grinding operation identified as EU-F06N with a rated capacity of 5 tons per hour, controlled by a 21,000 cfm fabric filter baghouse exhausting to stack SV-06N.
- (b) One block broaching operation identified as EU-F07N with a rated capacity of 10 tons per hour, controlled by a 21,000 cfm fabric filter baghouse exhausting to stack SV-07N.

History

On October 24, 2002, International Truck and Engine Company submitted an application to the OAQ and OES requesting to add head grinding and block broaching operations to their existing plant. International Truck and Engine Corporation submitted a Part 70 permit application on October 24, 1996.

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(4)(A) as the uncontrolled potential to emit PM and PM10 exceeds 25 tons per year.

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted facilities/units:

(a) One (1) head grinding operation identified as EU-F06N with a rated capacity of 5 tons per hour, controlled by a 21,000 cfm fabric filter baghouse exhausting to stack SV-06N.

Enforcement Issue

- (a) OES is aware that EU-F06N has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled Unpermitted Emission Units and Pollution Control Equipment.
- (b) OES is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Stack Summary

| Stack ID | Operation | Height (feet) | Diameter (feet) | Flow Rate (acfm) | Temperature (ºF) |
|----------|-----------------|------------------|--------------------|---------------------|---------------------|
| SV-07N | block broaching | 50 | 3 | 21,000 | ambient |
| SV-06N | head grinding | 50 | 3 | 21,000 | ambient |

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 24, 2002.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, page 1).

Potential To Emit of the Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

| Pollutant | Potential To Emit (tons/year) |
|-----------------|-------------------------------|
| PM | 1,116.9 |
| PM-10 | 111.7 |
| SO ₂ | |
| VOC | |
| CO | |
| NO _x | |

County Attainment Status

The source is located in Marion County.

| Pollutant | Status | | |
|-----------------|-------------|--|--|
| PM-10 | attainment | | |
| SO ₂ | maintenance | | |
| NO _x | attainment | | |
| Ozone | maintenance | | |
| CO | attainment | | |
| Lead | attainment | | |

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Marion County has been classified as attainment or unclassifiable for all other pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source Prevention of Significant Deterioration (PSD) Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

| Pollutant | Emissions (tons/year) | |
|-----------------|------------------------------------|--|
| PM | Greater than 250 | |
| PM-10 | Greater than 250 | |
| SO ₂ | Greater than 100 and less than 250 | |
| VOC | Greater than 250 | |
| со | Greater than 250 | |
| NOx | Greater than 250 | |

- (a) This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the 28 listed source categories.
- (b) These emissions are based upon the draft Part 70 Operating Permit.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

| | Potential to Emit (tons/year) | | | | | | |
|-------------------------|----------------------------------|-------|-----------------|-----|----|-----------------|------|
| Process/facility | PM | PM-10 | SO ₂ | VOC | CO | NO _x | HAPs |
| head grinding operation | 3.94 | 3.94 | 0 | 0 | 0 | 0 | 0 |

| block broaching operation | 3.94 | 3.94 | 0 | 0 | 0 | 0 | 0 |
|----------------------------|------|------|----|----|-----|----|----|
| Total Project Emissions | 7.88 | 7.88 | 0 | 0 | 0 | 0 | 0 |
| PSD Significance level | 25 | 15 | 40 | 40 | 100 | 40 | NA |

This modification to an existing major stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

State Rule Applicability - Individual Facilities

326 IAC 2-2 and 40 CFR 52.21 (Prevention of Significant Deterioration)

The existing facility is a major source under the PSD rules in 326 IAC 2-2. In order to keep emissions from this modification below PSD significance levels (25 tons per year of PM and 15 tons per year of PM10), filterable and condensible emissions of PM and PM10 from the head grinding and block broaching operations shall be limited to less than 0.005 grains per dry standard cubic foot. This limit effectively limits PM and PM10 emissions to 7.88 tons per year. Therefore, 326 IAC 2-2 is not applicable to this modification.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 51-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), visible emissions shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) opacity in twenty-four hours (24) consecutive readings as determined by 326 IAC 5-1-4,
- (b) Opacity shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

326 IAC 6-1 (Particulate Matter Limitations)

International Truck and Engine Corporation is located in Marion County, and has potential PM emissions greater than 100 tons per year, therefore, the requirements of 326 IAC 6-1 apply. Since this emissions unit is not specifically regulated under subsections (b) through (g) of 326 IAC 6-1, the general emissions limitation under subsection (a) applies. Pursuant to 326 IAC 6-1-2(a), the PM emissions from EU-F06N and EU-F07N are limited to 0.03 grains per dry standard cubic foot (gr/dscf) of exhaust gas. The proposed baghouses have design grain loadings of 0.005 (gr/dscf). Therefore, the requirements of this rule are met.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill

the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this modification are as follows:

- 1. The head grinding and block broaching operations have applicable compliance monitoring conditions as specified below:
 - (a) Once per shift emissions notations of the head grinding and block broaching operations stack exhaust shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.
 - (b) The Permittee shall record the total static pressure drop across the baghouses controlling the head grinding and block broaching operations, at least once per shift when the head grinding and block broaching operations are in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 3.0 to 6.0 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for these units shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

These monitoring conditions are necessary because the baghouses for the head grinding and block broaching operation processes must operate properly to ensure compliance with 326 IAC 6-1-2(a) (Nonattainment Area Particulate Limitations) and 326 IAC 2-2 (PSD).

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 097-16709-00039.

Company Name: International Truck and Engine Company
Address City IN Zip: 5565 Brookville Road, Indianapolis, Indiana

CP: 097-11392
Plt ID: 097-00039
Reviewer: MOP
Date: 12/30/02

Head Grinding Operation Baghouse

PM/PM-10 (controlled) = Grain Loading (grains/acfm) x Flowrate (acfm)

PM/PM-10 (controlled) = 0.005 (grains/acfm) x 21,000 (acfm) x 60 (min/hr) x 1 (lb/7000 grains)

PM/PM-10 (controlled) = 0.9 (lb/hr)

PM/PM-10 (controlled) = 0.9 (lb/hr) x 8760 (hr/yr) x 1 (ton/2000 lb) = 3.94 (ton/yr)

PM (uncontrolled) = 17 (lb/ton metal) * 5 (tons/hr) = 85 (lb/hr)

PM (uncontrolled) = 85 (lb/hr) x 8760 (hr/yr) x 1 (ton/2000 lb) = 372.3 (ton/yr)

PM-10 (uncontrolled) = 1.7 (lb/ton metal) * 5 (tons/hr) = 8.5 (lb/hr)

PM-10 (uncontrolled) = 8.5 (lb/hr) x 8760 (hr/yr) x 1 (ton/2000 lb) = 37.2 (ton/yr)

Block Broaching Operation Baghouse

PM/PM-10 (controlled) = Grain Loading (grains/acfm) x Flowrate (acfm)

PM/PM-10 (controlled) = 0.005 (grains/acfm) x 21,000 (acfm) x 60 (min/hr) x 1 (lb/7000 grains)

PM/PM-10 (controlled) = 0.9 (lb/hr)

PM/PM-10 (controlled) = 0.9 (lb/hr) x 8760 (hr/yr) x 1 (ton/2000 lb) = 3.94 (ton/yr)

PM (uncontrolled) = 17 (lb/ton metal) * 10 (tons/hr) = 170 (lb/hr)

PM (uncontrolled) = 170 (lb/hr) x 8760 (hr/yr) x 1 (ton/2000 lb) = 744.6 (ton/yr)

PM-10 (uncontrolled) = 1.7 (lb/ton metal) * 10 (tons/hr) = 17 (lb/hr)

PM-10 (uncontrolled) = 17 (lb/hr) x 8760 (hr/yr) x 1 (ton/2000 lb) = 74.5 (ton/yr)